



Minnesota Transportation Museum



**MINNEGAZETTE**

September/October 1986

## Hail The Shortline

Small, independent railroads gave the industry its start 150 years ago. They took the risks, raised the money, built the routes, developed the technologies and markets, and usually were swallowed up by bigger fish. Today's mega railroads to a large extent were sewn together from thousands of tough little independent shortlines cut and blasted into the American wilderness.

Being small, their fortunes rose and fell with the times, often under forces beyond their control. By the mid-1900's, consolidations had caused them nearly to disappear, but thinning and trimming in the 1980's is bringing them back in remarkable numbers. This issue of the **Minnegazette** notes some of their achievements.

Size is relative. In the early days shortlines really were short, often only a few miles. In today's context of 20,000 mile regional carriers, shortlines operate a few miles to a few hundred miles of line. Generically then, they are small, independent railroads, and perhaps the distinctions should stop there.

Shortlines historically ignored modern distinctions between freight and passenger, urban and rural, experimental and conventional. They hauled what needed hauling with the best hardware they could afford. Technology boundaries blurred as steam locomotives shrunk for city operation, while trolleys and gas cars grew into big locomotives. What, for example, is a "galloping goose" if not a simple expedient? Human roles blurred too when a **Thomas Lowry** sat in the president's chair of both a steam railroad and a large city transit system. It was all transportation to him.



## Calendar Of Events

The dates and locations of membership meetings have been finalized for 1986. Please note them in your calendar. Other events still are being scheduled. Events and their dates can change, so please watch this column.

**Sept 23:** Membership Meeting, 7:30 p.m., National Guard Auditorium, Fort Snelling.

**Nov 25:** Annual Membership Meeting & Election of 1987 Officers, 7:30 p.m., Northwestern Life Insurance building, 20 Washington Ave., Minneapolis.

The survivors have faced the heaviest of odds. It borders on miraculous that those reported in this issue have survived at all. Yet they do, as in New Orleans which recently observed 150 continuous years of service on **St Charles Street**. San Francisco's cablecars, in whose development **Southern Pacific** was instrumental, are more than curios from the 1870's: they haul a lot of people to work every day in 1986. Some even are reincarnated as witness ticket sales between Georgetown and Silver Plume, Colorado.

Super highways, corporate mergers, urban sprawl, changing economics and yes, even nostalgia, all have contributed to the shortline renaissance. In the past decade they have grown into national movements with their own associations, lobbyists and grass roots constituencies. In the countryside, independents are on the cutting edge in the struggle to reform work rules and customer service. For them it means survival. A growing number of cities are reinstituting commuter rail services that began modestly long before most can remember. What could be more historically significant?

So hats off to small, independent railroads. They revolutionized transportation when the nation was young, and they might just do it again as we enter our third century.

## About The Cover

The **East Troy Electric Railroad** in Wisconsin tells it all, from steam road in 1857 to electric interurban in 1907, to municipal ownership in 1939, to museum site in 1970, and today a for-profit diesel freight hauler offering trolley excursions. A Snelling Shops graduate, Car 253 heads for Mukwanago in September, 1986. **Aaron Isaacs Photo.**

## President's Message

With just a few weeks left, the 1986 operating season has been a mixed bag for MTM. Our one operation at Stillwater ran well and was well attended. We came close to realizing our land swap at Duluth Junction, although it looks as if continuing objections from the **Attorney General's** office will delay it further into this winter. The insurance problem has cut severely into our other railroad operations.

However, the **Jackson Street Roundhouse** project is looking very good. We have leased out part of the building to help defray some costs. If everything goes well, we may be able to move into a small part of the building in 1987 to begin some restoration and to set up limited public exhibits.

It has been a banner year for the Traction Division. Steady, well-coordinated efforts by members at **Como-Harriet** have really paid off.

When the group leaders call you to enlist your help, please give them all the help you can. With all the tasks ahead for MTM, we must have your help. I want to thank each and every member for coming out this season to make it a success.

**Gene Corbey**  
President

## Minnegazette Deadline

Please submit articles and photos for the **November/December Minnegazette** to the Editor by October 20, 1986.



Published bi-monthly for members in good standing of the Minnesota Transportation Museum, Inc.

Articles and photos of museum interest are always welcome and will be returned upon request.

Please address all communications to the editor,

**Bill Graham, Minnegazette**  
5818 Knox Avenue South  
Minneapolis, MN 55419



## Tourist Railway Insurance: A Dilemma

(Editor's Note: Article appeared in the August, 1986, issue of **TRAINLINE**, newsletter of the **Tourist Railway Association** of which MTM is a member organization. The author helped negotiate and manages TRAIN's group insurance policy with the **Lexington Insurance Group**, to which MTM also subscribes.)

While renewing a tourist railroad policy in 1976, it seemed to me that the premium was higher than the insurance company required for its exposure. The insured felt he was over the proverbial barrel without other insurance options, and that TRAIN had been working on his concern without much success. He mentioned that the late **Sam Freeman**, a founder of TRAIN, had been working on the insurance problem for some time.

Thus I became acquainted with Sam, and entered a dialogue with other TRAIN members. We researched the company markets to find a carrier interested in this type of businesses on an affordable and available basis. It was concluded that one carrier had experience in the overall class and was "comfortable" with this type of tourist operation. The company's representative attended the 1977 TRAIN Convention at Birmingham, AL, where he indicated the concept could work, and a dependable market could be established for the mutual benefit of tourist operators and the company. Negotiations were completed, and the insurance program was initiated on April 1, 1978. Some years later, the record proves that the program has been beneficial to all parties, and a definite bonus to TRAIN member organizations.

Now the insurance industry has "cycled" one more time. The media regularly tell us about the "liability insurance crisis." The insurance industry as well as subscribers interpret the endless figures and statistics variously, usually according to their own viewpoints. However, a plethora of information does not necessarily equate to understanding. To us, the insurance-buying public, the current situation is confusing and frustrating to put it mildly.

Without going into the horrifying details, suffice it to say that the insurance principle was violated by the obsession to make a profit, rather than the primary justification for insurance which is to pay for losses. Put another way, the industry became infested with "cash flow mania" management, and left their

insurance cadre to fend for themselves. Some of the schemes to preserve assets today, while excellent financial approaches, are simply not insurance. To paraphrase **Elbert Hubbard**, they have the same relationship to insurance as bullfighting has to agriculture.

Our most effective influence is to make our elected representatives aware that we want more than conversation from all these selfish interests. We want some intellectually honest progress! What is presented to us currently are highly persuasive arguments from the legal profession, the insurance industry, and consumer spokesmen. These views come from highly articulate sources, and I am near the point of believing whatever the last person tells me. This is a helluva way to run a railroad!

Some wag once said "consistency is the hallmark of a fool." Fortunately, the insurance arena is not foolish. What goes up must come down, although the damage from the fall is unpredictable. The greatest damage will be to the credibility of an industry in which some companies have treated their employees in a shabby manner and the public (that's us) worse.

For the insured who are going "bare," i.e., those who operate without insurance or without enough of it, the consequences are stark and very real. I respectfully point out that the TRAIN insurance carrier has been doing its job and remains committed to tourist railway operators. It was the carrier's reinsurers who fled the scene. In my judgement this has been a class act by the primary carrier, who could have retired from our case leaving us high, dry and "bare."

Some groups have considered association insurance companies, captives or "rent a captive" concepts. This is a large and tedious subject that requires much time and thought. The cost to set up a captive is quite modest, the top being around \$10,000. The capitalization necessary is more than modest, but the feasibility study can be expensive. This is the amount needed to interest a reputable reinsurer and keep him interested. This article would be far too long if all the facets were detailed about "our own insurance company."

**Gene R Shores**  
ESP Administrators  
Shawnee Mission, KA

## Board Of Directors

At a special meeting on August 9, 1986, the Board of Directors approved a mortgage agreement with **Arthur E Pew** for the **Jackson Street Roundhouse** property in St Paul.

At the regular meeting on August 19, the Board approved the following actions:

1. Requested Museum Counsel **Philip Martini** to write to **Governor Rudy Perpich** seeking prompt resolution of the Duluth Junction land swap.
2. Authorized **Bill Graham** to solicit commercial proposals for rehabilitation of Doodlebug car 9735.
3. Authorized **Mike Buck** to reproduce photographs published in **ELECTRIC RAILWAYS OF MINNESOTA** for a video tape production, with net receipts to be deposited in the Traction Fund.
4. Approved leasing of an **Andersen Corporation** locomotive for weekend operation at the Stillwater site.
5. Approved donation of the Bayport depot building to the **Stillwater Area Chamber of Commerce** to be relocated at Stillwater and available for limited MTM use.



## Changes At MTC

**Bruce G Nawrocki**, the longest serving **Metropolitan Transit Commissioner**, left that board in August at the end of his term. He was appointed to the MTC in 1967 following its establishment by the **Minnesota Legislature**, representing the Twin Cities northern suburbs. Bruce has served as mayor of **Columbia Heights** since 1965, on the Transportation Advisory Board, and worked with numerous public policy groups.

The new commissioner is **Glenn G C Olson**, a former MTC and **Metropolitan Council** member and President of the **Minneapolis City Council**. He will represent all the suburbs on the 3-member Commission, the others representing the Cities of Minneapolis and St Paul. Glenn has a long public service record, and has been a vocal proponent for a regional rapid transit system.



City of Lowell, MA, needed vintage streetcars for its mill district restoration. Harold Godbertson's Germaco Company, Ida Grove, IA, built three cars from 1890 J G Brill Company plans with trucks from Melbourne, Australia. High quality matches genuine Brills at \$150,000 each paid by National Park Service. Jim Graham Photo.

## Jackson Street Makes Progress

### Pew Buys Roundhouse

Museum director **Arthur E Pew** has purchased the **Jackson Street Roundhouse** property in St Paul from **George Rutman**. At a special meeting on August 9, the Museum Board of Directors approved a new mortgage agreement with Art for the property.

The new arrangement permits termination of the Museum's contract for deed with Rutman, and effectively makes Art the Museum's banker. MTM continues to owe about \$844,000 on the property, for which fund raising efforts will continue. Part of this amount will be raised from lease payments by the building's new mini-storage tenant.

### Member Pledges Still Needed

Art's action in no way removes the need to raise big money to pay for the

building. It was intended only to give MTM more flexibility in raising the funds. Only about **one-fourth** of the Museum membership has pledged support to the Roundhouse fund so far. Many more member pledges are needed in order to interest large foundation and corporate donors in the project.

An anonymous letter to the **Minneapolis Gazette** made the following comment:

"When I first received the request for (donations to) the Roundhouse project, I inferred from it that you were primarily looking for large contributions that would be repeated month after month. Consequently, I (and I'm sure other MTM members) set the request aside for many weeks. You and the Advisory Board need to recommunicate the importance of each MTM member pledging \$5, \$10 or \$15. If this is emphasized, I'm sure many more members will respond."

**Any pledge in any amount from MTM'ers is welcome, urgently needed**

and now. If you have not pledged, please do so. You need not be wealthy to help the Jackson Street museum become a reality.

## MTM Cars Go To Milbank

Three MTM coaches went to Milbank, SD, for **Dakota Rail** excursions at "Trainfest", August 7-9. Ex-Great Northern A-11 and 1213, and Ex-CNW 1096 were ferried on a Soo Line way freight, accompanied by member **Mike Hanson**. Freshly painted in "Empire Builder" colors, the cars carried over 1,200 people on eight round-trips between Milbank and Corona, and were a great hit with the public.

**Dakota Rail** owner **Jerry Ross** now is considering repainting his three ex-Milwaukee Road coaches in their original maroon and orange "Hiawatha" colors for next year's "Trainfest." Such an event would quicken many hearts, especially in Milbank where "railroad" will always mean "Milwaukee Road."



## Minnetonka Gets A Zephyr

Dinner train service began September 14 on the Hutchinson branchline, originating at the **Spring Park** depot on Lake Minnetonka. At \$39.50 per passenger, the train offers a full course dinner and ever-changing views as the restored streamliner rocks slowly through the woods and by the shore.

The dinner train idea first surfaced on the **Cedar Valley Railroad**, the former Illinois Central route between Albert Lea, MN, and Waterloo, IA, where the "Star Clipper" has been immensely successful. The same operator sponsors the "Minnetonka Zephyr," a two-tone gray set of refurbished cars bracketed by a pair of F7 units. The Hutchinson branch now operated by **Dakota Rail** affords lower labor costs than a Class I railroad. The location is promising less than a mile from **Lord Fletcher's**, prominent upscale watering spot in the western suburbs of Minneapolis.

Coaches with attractively redone interiors come from the Chessie, Rio Grande, Rock Island and Baltimore & Ohio. A former Milwaukee Road baggage/dormitory car carries crew space and a head end power plant. Reservations are recommended well in advance by calling **612-471-0977**.

## New Ballast Hopper For Stillwater

Member **Larry Schulte** had enough of Museum track ballasting practices. After three seasons of shoveling rock from work flats by hand, he took matters into his own hands and ordered construction of a custom-made ballast hopper from a machine shop at his home in River Falls, WI. **Orville Richter** collaborated in designing the car, built on the frame of an old Jackson tamper donated by the **Minnesota Transfer Railway**. In view of the Museum's financial condition, Larry donated the cost of construction.

A tractor provided by **Oak Glen Golf Course** is used to load the car from the pile at McKusick Road. The car carries about two cubic yards of ballast on four wheels, but otherwise looks like a miniature version of a modern coal hopper. Two sloping hoppers feed ballast into dumping pockets at each corner of the car. The operator can administer exactly the right dose of ballast through simple, hand-operated gates below each pocket to either side of the rail.

The first test was held on August 29, when the car and a four-man crew ballasted 40 feet of track in about 20 minutes. No blisters or pulled muscles were reported, and all agreed that the 20th Century finally had arrived at Stillwater. Thanks to Larry from all the rock

shovelers who have wondered whether they were having fun yet. The new hopper needs a name, perhaps "Larry's Larry."



## Traction Report

### August Riders Set Record

Streetcar ridership through the Labor Day weekend totaled 42,663. So far, 1986 is our fifth biggest year with a record August and no less than nine Sundays over 1,000 riders. The monthly totals to date are as follows:

|        | Regular | Charter |
|--------|---------|---------|
| May    | 3,186   | 443     |
| June   | 10,356  | 1,056   |
| July   | 12,615  | 1,195   |
| August | 12,201  | 752     |

### 78 Makes Rapid Recovery

Prospects for **Duluth Street Railway Car 78** were unknown when it arrived at Lake Harriet in November, 1985. Members hopefully referred to it as a "basket case" on the chance that it actually could be restored. No one knew for sure that it could be more than a pattern for a new replica. The astounding progress since then bears out our hope.

Groups formed around two primary jobs. The motor truck drew **Larry Schreiber, Roy Harvey, Neil Howes, Walt Strobel, Scott Wardrobe, and George Isaacs**. The larger task of the carbody itself attracted **Bob Dumas, Loren Martin, Keith Anderson, Duane Hasig, Mike Buck, Gene Hickey, and Bill Graham**. At first, they worked on the usual Wednesday evenings, but as things snowballed they began showing up more often to push things along.

Carbody framing is now finished, and exterior panels are being installed. One of the vestibules is taking shape. A new air reservoir arrived for which mounts are being welded up, and design is complete for the brake cylinder and connecting linkage. In late September, the traction motors and air compressor will be sent out for servicing, and the truck frame will be sandblasted and painted.



MTM's ex-Great Northern office car A-11 boards "Trainfest" passengers at Milbank, SD, August 8, 1986. Images By Lily Photo.



In Sunday best with lapel ribbons, old soldiers stroll The Avenue, Minneapolis, in 1900. Buildings L - R are Masonic Temple now Hennepin Center for the Arts, West Hotel and Lumber Exchange. Horse cart trots beside TCL single trucker at 6th & Hennepin. Minnesota Historical Society Photo.

Number 78 will be a "double-ender" as it originally was, with full controls at both ends and the reversable trolley pole mounted in the center of the roof. The platforms will be enclosed at the ends with open passenger entries at the four corners protected by folding gates. Air brakes will be a concession to safety and modern times instead of the hand cranks, but gooseneck handles will be installed for authenticity and hand operation of the brakes.

Thus 78 will eliminate the uncertainty of "backing against the trolley pole." A single crew member will be able to operate No 78 by walking the trolley pole around to the other direction, securing the entry gates and carrying his control handles to the other end of the car.

She was retired before even 20 years of service because she was too small to carry the traffic, seating only about 30 people. That will haunt her again at Lake Harriet, although a second retirement probably is not in the cards. Guessing is that 78 will augment standard car service, and will operate alone when smaller crowds are expected.

### Thanks, Volunteers

Special thanks to over 100 members who made the streetcar line run this year. As 1987 nears, members are asked to consider volunteering for supervisory jobs that keep the line running smoothly. Old hands can get tired, and new faces always are warmly welcome.

### Badges for CHSL Volunteers

To inform riders that MTM volunteers make this operation possible, a special embroidered cloth patch is being manufactured. The cloth is yellow with forest green border and lettering, a red streetcar and black track. Operators, track and wire gangs, crew schedulers, gardeners, cashiers, maintenance and restoration people, will receive a patch in recognition of their efforts. Additional patches will be available for \$2 while the supply lasts. Orders are in for 250 to be available in October.

The patch is **not** to be worn on the streetcar operator's uniform, but is intended for caps, jackets, coveralls or any other non-operator's clothing you may choose. Wear it proudly and deserve it!





Portland's LRT is "off the shelf," simple and relatively cheap. Articulated Bombardier cars lay over at 11th & Yamhill storage area downtown. No 106 was displayed in Minneapolis in 1984. George Isaacs Photo.

## Rapid Transit Returns To Portland And Vancouver

- Paul Joyce

(Editor's Note: The author lives in Hopkins and represents District G on the **Regional Transit Board**. From 1979-1984, he served on the **Metropolitan Transit Commission** where he chaired the Transit Development Committee and initiated the restoration of MTM's two historic motor buses. In the 1960's and '70's, Paul served on MTM's Board of Directors where he helped found the **Como-Harriet Streetcar Line** and publish **ELECTRIC RAILWAYS OF MINNESOTA**.)

The Twin Cities is inexorably moving toward Light Rail Transit! This movement may seem almost imperceptible to the casual observer, but one must step back and view it in perspective.

During the late 1970's, the search for alternative transportation other than more roads and rubber was at a virtual standstill. The Regional Policy Plan

even contained a legal prohibition against the planning or construction of "fixed guideway" public transit service.

Since 1980, that has changed thanks to the vision of the **Metropolitan Council** and the **Regional Transit Board**. Several valuable studies have pointed the way. We are poised to embark on preliminary engineering for a first-stage backbone corridor of LRT that will be an effective component of our urban transit matrix.

As the discussion and studies go on, four RTB members and two staffers recently toured Portland's nearly completed **Banfield LRT** line, and also the Vancouver, BC, "**Skytrain System**." The latter is called ALRT or "automated light rapid transit," since it is elevated, automated and uses linear induction motors. The purpose was to compare the two types of systems, and to give members and staff hands-on experience

with them. The following are excerpts from the staff report on this educational and informative trip.

"Both systems were very impressive, and the hospitality we received from people in both cities was fantastic! In both cases, we were able to talk with the staff about the planning, organization and implementation of the projects. We learned of their successes, failures, what they might have done differently, technical details, and actually rode the systems. Portland's LRT was still in the testing stage at the time of our visit, although Vancouver's was open to the public.

### Portland

"We were taken on a tour of the downtown area to see the streets where the LRT will operate and the bus malls. We then drove along the line next to the

Banfield Expressway as it moves through portions of the central city. We stopped at one of the major stations which includes a park-ride lot and a major bus timed-transfer facility. Last, we rode a five-mile stretch of the system in the Gresham area that was open for testing.

"Specific information and observations on the system include the following:

- The LRT route is 15 miles from Portland eastward to Gresham.

- It cost Portland about \$211.7 million, compared to about \$500 million for nine-mile Highway 12/394 project in Minneapolis.

- Portland LRT operates at grade through the downtown area on existing streets that will continue to carry regular traffic in one lane. It follows an old right of way down the center of a street that has been reconstructed with single lanes on either side of the LRT track.

- A similar, simple design is used for all stations with some variation in the historic areas of downtown. Major stations have park-ride and timed-transfer bus facilities. The stations blend well with the areas and total 25 in all.

- Wheelchair lifts are not on the LRT vehicles, but rather are permanently installed at each station. This saves on the number of lifts needed (25 as opposed to 60 if mounted on the vehicles), and allows for repair without taking a vehicle out of service. The lifts are located in a brick shelter at each station.

- The vehicles provided a smooth, comfortable ride. Traffic signals at intersections are set for pre-emption by the LRT vehicles. As a vehicle approaches a street intersection, a signal pole indicates to the driver whether the vehicle has pre-emption at the signal. If so, the driver proceeds through the intersection. If not, the signal tells the driver to stop.

- The transit agency, **Tri-Met**, undertook a major effort to talk to neighborhoods and property owners about each step of the project. Several staff people meet with these groups regularly to resolve problems. Because of this outreach program, Tri-Met feels that the system is well-received. A number of RTB members who visited Portland a few years ago remarked that the residential areas look much better now than they did then.

- The bus timed-transfer system is working well, and will be integrated with the new LRT system.



LRT enters downtown Portland on double track reserved transit mall, dividing to single-track loop through core area. George Isaacs Photo.



New LRT track forms one-way loop on parallel streets across Portland's downtown area. Passengers board from curb, while cobble stones discourage motorists from transitway. Better transit and planning brings big changes to Portland. Paul Joyce Photo.

## Vancouver

"We saw a presentation on UTDC (**Urban Transportation Development Corporation**) which built the Vancouver Skytrain. We then rode the system out to New Westminster and back. After the trip we met with staff of **BC Transit** to learn about development and construction of the system.

"We discussed details of the project - timing, financing and problems - with the BC Transit project manager. We also discussed the status of planning in the Twin Cities. We rode the Seabus across to North Vancouver and back, toured the Canadian Pavilion and then were free to see Expo '86 on our own.

- UTDC, established by the Ontario Government in 1973, offers a wide





**"Skytrain" linear induction motor pathway lies between two running rails with power rails to right. No motormen, hence no windshields. Paul Joyce Photo.**

range of services and equipment. This includes the advanced light rapid transit system (ALRT or Skytrain), streetcars, commuter trains and international expertise. UTDC (USA) Inc handles products in the US.

- The Canadian federal government provides no direct funding for transit, but provides indirect funding to the Provinces for "grade separated highways" which can be used for transit service.

- Skytrain is an ALRT system. It is fully automated and operates from downtown Vancouver to New Westminister, about 11 miles with 15 stations. Cars are powered by two linear induction motors.

- Construction took four years, cost \$854 million, and has been open since January, 1986. Ridership has been higher than expected, and Expo '86 has brought crush loads.

- Cars and stations are clean, comfortable and well-maintained. Vehicles are a

little noisy due to recent wheel problems, but attempts are underway to make them quieter. Lots of new development was seen around stations which are well used during both peak and off-peak periods.

"BC Transit outlined some of the key points that went into their planning and execution of the system:

- Vancouver has no freeway system. In 1972-75, the Regional Planning Authority drew up a "liveable space strategy." People live in Vancouver for its lifestyle, with which it was felt that freeways would be incompatible. Thus, public transit was the only effective way to move people.

- Transit operating costs and deficit increased rapidly in the 1970's, forcing Vancouver to look for alternative non-bus systems in major traffic corridors. Studies identified those corridors and the available system options. At-grade systems were rejected due to numerous street crossings, while underground systems were considered too expensive.



**Vancouver chose "hi-tech" rapid transit system at a price. "Skytrain" enters downtown on elevated structure. George Isaacs Photo.**



Above-ground construction was selected for most of the new system. Fully automatic train control was selected for reasons of safety, speed and reduced operating cost.

- Vancouver considered building the system through open competitive bidding, and through pre-selection of bidders. Hardware systems that appeared unlikely to work reliably were disqualified. The decision was to select UTDC as sole-source hardware supplier.

- A one-mile section of the system was built and opened early in the program for testing and public exposure.

**Vancouver Skytrain propulsion and control systems require track fully separated from other traffic. Extensive structures contribute to \$40 million per mile price tag.**

**Station platforms like those of any modern "metro" also need full grade separation with escalators to street level.**

- A uniform system of fare collection for bus and rapid transit was initiated after Skytrain opened to improve passenger convenience. Bus service has been improved and tied into major rapid transit stations. This coordinated service will be expanded considerably over the next two years.

- Studies show that commuters actually have switched from their private automobiles to "Skytrain."

## Conclusions

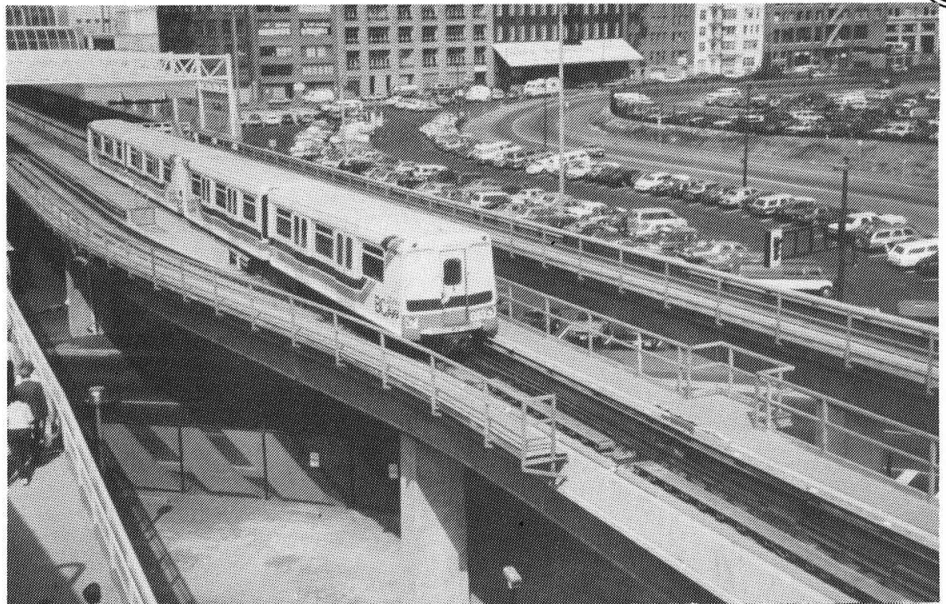
"The Portland LRT represents proven 'state of the art, off the shelf' technology well suited to the Twin Cities area. There is obvious similarity between Portland's Burnside Street and Minneapolis-St Paul's University Avenue.

"Vancouver's ALRT is a very expensive, new technology best described as a 'patent system;' that is, vehicles, power systems and spare parts must be bought from a single manufacturer. The cost implications are obvious.

"Linear induction propulsion is on the cutting edge of technology. Vancouver has had real problems with it, although they intend to persevere. We wish them well.

**Modern interiors are attractive, but question arises why cars do not provide more space. High system cost could have included wider loading gauge.**

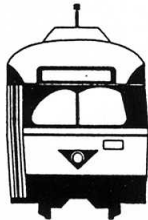
George Isaacs Photos.





"While Portland's and Vancouver's systems are radically different from each other, they share a common thread: **both set out to find a new solution to transit problems.** They chose this over continuing in the same old rut of building more and more highways with their enormous economic and social cost, and which often are obsolete on or before the day they open.

"We must believe that the Twin Cities Metropolitan Area finally will shelve our provincial differences, and embrace the vision of our sister cities. Even in California where the personal auto is king, people finally have come to their senses and accepted **Light Rail Transit** as part of their urban transportation solution."



## Portland & Vancouver Impressions

- George K Isaacs, P.E.

Florence and I returned in late August from an Amtrak trip to Glacier Park, Portland and Seattle, with a bus side trip to Vancouver, BC. We had the opportunity to ride the **Waterfront Streetcar** in Seattle and the **"Skytrain"** in Vancouver. We observed trial runs of Portland's light rail vehicles on the downtown streets and at the eastern end of the line in Gresham. Portland's line opened to the public on September 6, a week after our visit. I offer the following comments on the three systems.

Two car LRV's built by Bombardier glided quietly on the streets of downtown Portland. Although the track is built in the street right of way, its lane is bordered and paved with knobby paving blocks to keep motorists in their own lane.

There are seven stations in the down-

town area, plus a three-track storage terminal at 11th and Yamhill. Transfer between LRV and buses is convenient, since the LRT line crosses the two bus-only malls in the center of the city.

East of the Wilamette River and beyond Lloyd Center, an in-town shopping mall, the LRT line runs beside the Banfield Expressway on its own right of way. It will be interesting to read the minds of commuting motorists as they creep along on the jammed expressway while the LRV's whiz by at 55 mph. At Gateway, the east end of the expressway section, a large transfer station will distribute many of the passengers to feeder buses.

The line proceeds east for five miles in the median strip of East Burnside Street to Rudy Junction where the maintenance shops are located. The line then becomes single track and proceeds farther east on the right of way of the



LRT and waiting stations occupy Burnside Street median east of downtown Portland. Left turn lane at far left. LRT on University Avenue would appear similar. Paul Joyce Photo.

old **Portland Traction** interurban line.

At the 1986 cost of \$14 million per mile, the people of Portland have the beginnings of a good corridor transit system.

Seattle has 1.5 miles (2.4 km) of rail transit in the form of the **Waterfront Streetcar**. This line uses **Burlington Northern** trackage alongside Alaskan Way, the road the serves the waterfront. Of the ten piers along the line, only three serve ferries and other passenger ships. The rest are converted to restaurants, tourist boutiques, attractions and a motel. It is a busy tourist center.

The line is operated by **Seattle Metro**, the transit agency for the King County area. The streetcars are former Melbourne, Australia, W-2's built in the mid-1920's. These cars are the same class as those at **Ironworld USA**.

Seattle has three operating cars, although the line can handle only two at a time. The fare is the usual Metro single ride fare, good for one and one-half hours of riding on the entire Metro system. Tickets are purchased from vending machines on the platform of the seven stations along the line. According to **Malcolm "Whitey" Rickert**, maintenance supervisor, the line carries as many as 3,600 passengers on a good day.

The Waterfront Streetcar is the brainchild of **George E Benson**, Seattle City Councilman, MTM member and former Minneapolis. I wonder where he got his love for streetcars?

Vancouver has put into service a 13 mile (21 km) high-tech, automated rail transit line they call "Skytrain." Politicians selected this type of system over conventional LRT to show that Vancouver and **Expo '86** are on the cutting edge of technology. What did they get?

The line runs from the old **Canadian Pacific Railway** station through the **Dunsmuir Railroad Tunnel** under downtown, and then southeasterly to the suburb of New Westminster. There are 14 stations including terminals. The line is completely grade-separated since a third and fourth rail are used to distribute electric power. Over one-half the system is elevated.

Trains consist of two sets of two semi-permanently coupled cars, each 42 feet long and eight feet wide. Traction power and braking is provided by the linear induction motor principle. An on board inverter changes the 600 volts DC to a variable frequency voltage, three-phase current to control speed and braking. The 20-inch wheels on a steerable truck



Three-track downtown storage yard also serves as boarding area.



Large park-rides and coordinated feeder bus service make access to LRT easy. George Isaacs Photo.

frame do not supply tractive or braking effort. The cars are driverless.

In the writer's opinion, "Skytrain" does work but not well, certainly not as well as a system should that cost \$46 million (US) to build **per mile**. My objections are as follows:

1. The squeal of wheel on rail is terrible while negotiating curves. I observed several young ladies covering their ears on the curves between Waterfront and Burrard stations. The noise level is so

high that the automated station announcements cannot be heard, and indicates an extremely high rate of wheel and rail wear for a brand-new system.

2. The electronic inverter is noisy during acceleration and braking.

3. Braking is jerky when coming into stations.

4. The interior width of the cars is less than that of a standard diesel transit bus. This contributes to a greater





Far side stops at intersections along Burnside Street east of downtown Portland feature left turn lanes, simple waiting shelters with wheelchair lifts, and pre-emptable traffic signals.

sense of togetherness, something some view negatively.

For those with long memories, this type of transit technology was considered for St Paul's "downtown people mover" system. Fortunately for us, the people voted down the aspirations of the politicians for a "high-tech" transit system.

Looks like a raw day for shooting Lowry Hill from roof of Plaza Hotel, Loring Park, Minneapolis, on December 27, 1946. TCL standard cars crawl south on Hennepin Avenue behind "Bryant-Johnson" car turned onto Lyndale Avenue. Billboard at far right advertises Burlington's new "Vistadome Zephyr."

Minnesota Historical Society Photo.





Minnesota Valley Railroad (ex-MILW) GP9's lug gondolas of kaolin clay eastbound at Fairfax, MN, August, 1986. Massive grain bins are only part of Fairfax Elevator Association facilities dependent on rail service. Bob Ball Photo.

## Observations

- Steve Glischinski

Minnesota's largest shortline railroad, the **Minnesota Valley** headquartered in Morton, is facing a critical dilemma. It has plenty of business, but track conditions are becoming so bad that they may soon be beyond economic repair. Without new capital from state or private sources, the shortline may not survive. But the line is making every attempt to continue operation, and at least for the present provides an interesting diversion for trainwatchers.

The Minnesota Valley (reporting marks MNVA) was born in 1984 when **Chicago & North Western** abandoned its former **Minneapolis & St. Louis** line from Norwood to Madison, MN. Under M&StL control, the line had extended from Hopkins all the way to Watertown, SD. It was home to a pair of the "Louie's" General Electric motor cars which provided the last passenger service on the M&StL, making their final Minneapolis-Watertown trips on July

20, 1960. Long a favorite of Twin Cities fans, the appropriate end came for the motor cars in the last year of M&StL's existence as a separate entity.

In the fall of 1960, the "Louie" was purchased by Chicago & North Western, and changes soon followed. The Watertown line's western end from Madison to Watertown was abandoned. The M&StL's brick depot in Watertown still stands. In 1979, the C&NW abandoned the eastern portion from Hopkins to Norwood in favor of trackage rights over the Milwaukee Road from St. Paul to a new connection at Norwood. The **Hennepin County Regional Railroad Authority** purchased the portion of right of way from Hopkins to Victoria in 1982 and 1984 for future use as a light rail transit line.

As track condition worsened in 1983, the C&NW decided to abandon the railroad rather than spend millions on rehabilitation. Shippers and counties fearful of losing service formed two regional rail authorities to purchase the line and contract for operation. The western 40 miles from Hanley Falls to Madison was

taken over by Burlington Northern under contract with the Lac Qui Parle rail authority. BN then upgraded the line to 30 mph speed. Operation of the eastern 94.7 miles from Norwood to Hanley Falls was taken over by the newly incorporated **Minnesota Valley Transportation Company**, along with 47 miles of C&NW trackage rights into Minneapolis.

MNVA purchased four ex-Milwaukee Road GP9's for motive power, and immediately received a big shot of business from on line shippers. However, the company ran up considerable debt and put little if any money into track rehabilitation. Shippers became dissatisfied as 100-ton grain hoppers pounded the track to shambles, and the Minnesota Valley rail authority began to question the quality of management. Early in 1986, **Larry Wood** purchased the operating company assuming its debts, the contract for deed to the property, plus all the deferred maintenance left by the previous owners.

Operations on "the Valley" are a





**Minnesota Valley maintains 29 wooden trestles in the 95 miles from Norwood to Hanley Falls, MN. Two over Minnesota River near Morton total over 4,000 feet long.**

chance for trainwatchers to see typical branchline railroading with vintage locomotives, an increasingly rare sight in this era of megamergers. Power is stored outdoors at Morton since there is no engine house. A crew takes 12 hours to work the 65 miles from Morton to Norwood with two men in the locomotive cab. Another man follows in a truck to aid with switching and drive the crew home to Morton. The next day, the train makes a Norwood to Minneapolis round-trip over the Soo Line (ex-Milwaukee) line, interchanging with the C&NW and the Soo at Bass Lake yard near Highways 7 and 100. The train then heads back to Morton, making it as far as possible before the 12-hour rule puts them out of service.

Better track of course would improve train speed and operating economics. But rehabilitation has been estimated as high as \$12 million which revenues possibly could sustain if carefully spread over ten to twelve years. There would be little room for error. Trips now run as needed, lately as often as seven days per week. Service west of Morton to the



**MNVA uses Milwaukee (Soo) mainline from Norwood to interchange at St Louis Park. Refrigerator cars originate at Bigstone Canning Company in Arlington for nationwide distribution. 100-ton grain hoppers are road's main traffic and biggest track maintenance headache. Ryan R Ball Photo.**



BN interchange at Hanley Falls also is as-needed, but should pick up as the grain harvest progresses.

## Short Items

Minnesota Valley won't be Minnesota's longest shortline for long; **Dakota, Minnesota & Eastern** soon will take over C&NW's Winona to Rapid City line, plus all remaining branchlines. Another new shortline, **Ottertail Valley**, will take over BN's 160-mile St Cloud to Moorhead line with headquarters at Fergus Falls . . . **Dakota Rail** has purchased four ex-Milwaukee Road switchers to handle its freight traffic; its two F7's are being used on the "**Minnetonka Zephyr**" dinner train to begin operations September 12 out of Spring Park, traveling east to Wayzata and west to St Bonifacius . . . Soo Line has donated FP7 No 2500A to the **Lake Superior Museum of Transportation** in Duluth. A former EMD demonstrator, the unit early in its career pulled the "Laker" passenger train between Chicago and Duluth. . . DM&IR operated a special train tour of the Twin Ports for the **American Institute of Mining Engineers**.



MNVA kaolin train eases eastward near Gaylord at jogging speed. Clay is mined near Redwood Falls for Mason City cement plant and paper mills. Track needs help urgently.



Minneapolis & St Louis Railway's 1880 depot at Fairfax, MN, served motor train passengers til 1960. Depot is vacant.

Robert M and Ryan R Ball Photos.





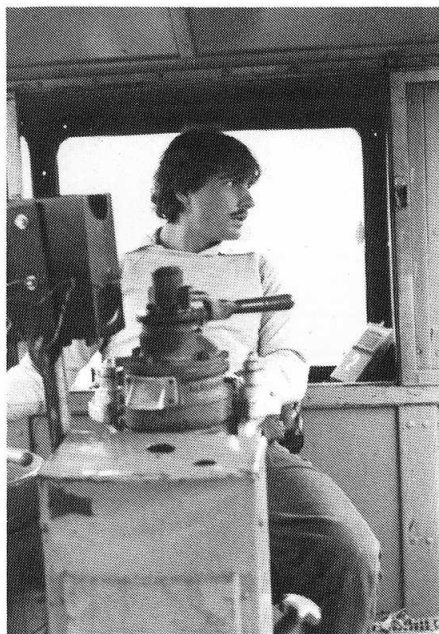
Dakota Rail SW 1200 heads west for Hutchinson from Lester Prairie, August 20, 1986.

## Hutchinson Branch Marks A Century

By Ferndale's gate, it begins as a pair of sidings off the **Burlington Northern's** high iron in Wayzata. Through Spring Park, Orono and Navarre, it brushes back yard shrubbery and the entrance to where **Jim Hill's** Lafayette Hotel stood, now the Lafayette country-club. Ancient store fronts still stand at road crossings where vacationers once boarded trains. But for the swimming pools and BMW's, the railroad looks much as it did when the **St Paul, Minneapolis & Manitoba Railway** built it back in 1886.

The suburbs end at Mound, at least as seen from the train window, as lake-shores, rolling hills and meadows, endless hardwood stands amble by. The "Hutch" takes the land in stride as a branchline should. It is one of the prettiest, old-fashioned little railroads still running in southeastern Minnesota.

**Jerry and Mike Ross**, operators of **Dakota Rail**, have kept the "Hutch" active since the Fall of 1985 when BN



Mike Ross spots lumber flats.

pulled out. It is their second shortline after the Sisseton branch in South Dakota, reported in the last issue of the **Minnegazette**. Lumber and chemical shipments to Lester Prairie and Hutchinson, and continuous loads of new ties and ballast keep the 60-pound rails well polished.

The branch had reached a point in 1985 where time honored railroad practices would have finished it. Track condition limits trains to about 8 mph, making a one-way trip into a seven to eight hour proposition. With in-bound carloads arriving unpredictably for shippers in two westend towns, good service requires more flexibility and motive power than a "normal" railroad operation. Thus, "as needed" operations are designed around the customers' needs and common sense; not around crew convenience.

For example, a pair of engines may deliver a consist of out-bound empties to the BN at Wayzata. One of the engines returns to Lester Prairie or Hutchinson with the in-bound loads, while the other

waits a day or more at Wayzata for other cars still in BN's pipeline. If a train has loads bound only for Lester Prairie, the engine ties up there while the shipper unloads, after which it returns the empties to the BN. The train watcher thus may find a Dakota Rail engine waiting dead on the mainline for arriving loads at Wayzata, a second delivering cars to Lester Prairie and a third being repaired or making up an out-bound consist at Hutchinson.

It makes for prompt service, low per diem and demurrage charges, and happy customers. The company must taxi crews to points along the line, but these trips are combined with track maintenance and other company errands. Mike Ross agreed that better track and higher speeds will improve crew and equipment utilization in the future. However, present practices help to build traffic, and are remarkably efficient within Dakota Rail's current limitations.

The operation of August 20 is typical. Jerry Ross drove son Mike and daughter **Kathy** from Hutchinson to Wayzata, dropping them off at 7:30 a.m. Jerry left to do other things, while Mike started up SW 1200 No 701 and Kathy checked waybills. The BN had delivered three loads of lumber but not the five cars of ballast needed by the maintenance of way gang. With Kathy as brakeman, Mike picked up his three loads and headed out of town.

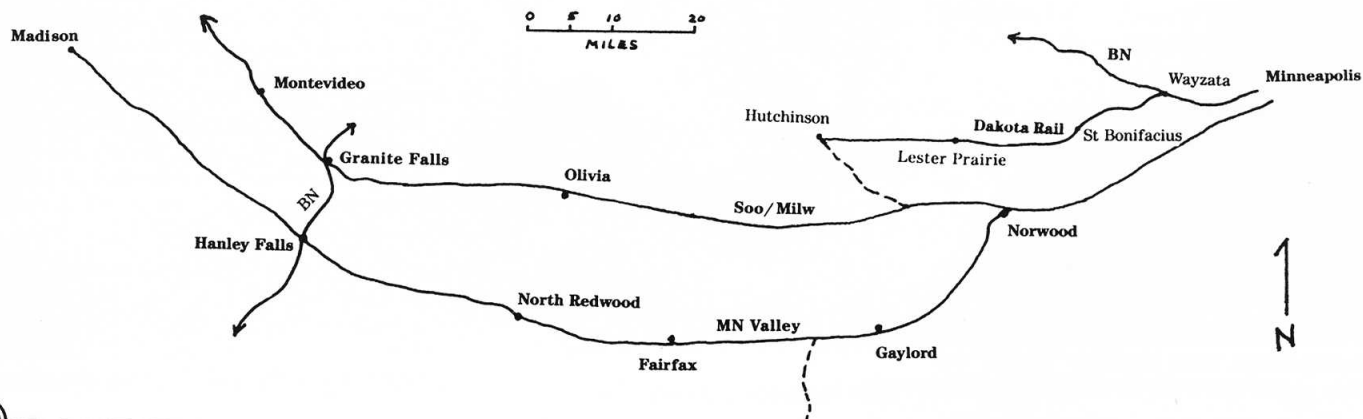
Mike is an accounting graduate who manages Dakota Rail's money. When not occupied with high finance, shipper relations and shoveling dirt with the track gang, he also runs trains. Kathy is a second year physical therapy student at the University of Minnesota, working this summer as a brakeman. She admits on occasion to have operated a locomotive.



Dakota Rail stops at Spring Park for coffee and journal oil. Dinner train coaches being readied for September service are seen in the distance.



Mike and Kathy searched for journal oil at Spring Park.





A stop was made at Spring Park for coffee and some oil to top off the locomotive's journal boxes. The run to Lester Prairie took nearly five hours over track the is, on the whole, quite straight and level. Maintenance forces were working near Mayer in pelting rain to fill a hole that suddenly had developed under the track. Though touch and go, everything stayed on the rails, and the

train followed the tamper to the siding at New Germany. Farther west, more track work and sun kinks again slowed things up.

The engine and a hopper car of chemicals from an earlier train was waiting at Lester Prairie. The shipper of the chemicals in Hutchinson had indicated he was not in a hurry for them. Mike and Kathy spotted their three loads of

lumber, picked up the hopper, and headed for home. The other engine stayed at Lester Prairie to return five empty lumber flats to the BN a day or two later.

And who needs the "Hutch?" **Lester's Inc.**, a building and insulation manufacturer in Lester Prairie, receives lumber from the Pacific Northwest and plastics from the Sun Belt. Without the railroad, Lester's would need to transload these shipments to trucks at high cost for delivery to their plant. **3M's** Hutchinson plastics plant similarly depends on rail shipment. McLeod County farmers would pay more for spring fertilizer shipped long distances by rail if it were trucked to local dealers. **Pure Culture Products** at Hutchinson ships ethanol more economically by rail.

New traffic is needed to secure the line's future. **Harvest States Cooperative** at Hutchinson is completing a 50-car grain loading facility to take advantage of BN's unit train rates to the West Coast. The **City of Hutchinson** is building a new track connection to the elevator, as well as a new connection to an industrial park north of town. The latter will cost about \$365,000, and will utilize remnants of **Electric Shortline Railroad** trackage in the city.

Dakota Rail receives its money through several collection methods. Some shipments are covered by a "junction settlement agreement" with BN by which the big carrier bills the shipper and returns part of the payment to Dakota Rail. Other shipments are covered by conventional tariff divisions with other carriers. Still others are surcharged for the distance of Dakota Rail's haul, and those shippers must pay the major carriers separately for continuation service.

Ross reports that BN has been helpful and appreciates the traffic his road generates. He estimates that 600-800 cars will move over his line in 1986. He looks forward to the new grain and industrial traffic originating at Hutchinson.

All this makes track rehabilitation a critical necessity to the shortline's future. A \$410,000 grant from the **Federal Railroad Administration's** Local Rail Assistance Program underwrote this year's first stage work. By August, 1986, a total of 11,000 tons of granite ballast and 10,000 new hardwood ties had been installed. The goal is 15,000 new ties by fall freeze up, concentrating on weak sections where derailment risk is greatest.



No 701 spots lumber flats at Lester Prairie as second SW waits dead on mainline.



Hutchinson train follows Dakota Rail's Cannon track tamper into New Germany.

About 14 employees keep the line open. The bulk of them work on track, and Dakota Rail uses its own forces for most maintenance work. A tamper and ballast regulator, bought new in 1982 for the Sisseton line, were augmented in 1986 by a reconditioned tie inserter and tie crane. Long sections of line already show major improvement, although much remains to be done.

Perhaps the biggest question mark is the 44 miles of 60-pound rail laid by the Manitoba a century ago. With traffic building, much of it in 100-ton cars, the light, work-hardened rail will show an increasing failure rate. Rail replacement is a tremendous expense, especially for a struggling new shortline. As earnings permit, Ross is buying 90-pound relay stock with which to begin spot replacement and to provide a supply of 60-pound relay stock.

Three Electro-Motive SW 1200 engines are based in Hutchinson to operate freight service. The former Milwaukee Road units are in reasonable mechanical condition and have performed well. The two F7 cab units will pull the "Minnetonka Zephyr" dinner train to begin service this fall from the Spring Park depot. Dakota Rail bases a fourth SW 1200 and a GP9 at Milbank to operate the Sisseton branch.



Kathy Ross set hand brakes on bulkhead lumber car as Mike holds it steady.



The Milwaukee Road may be dead but not on Dakota Rail. 1940 Rib-side caboose was built at West Milwaukee in best "Hiawatha" tradition.



Ex-Milwaukee Road No 701 of Dakota Rail rambles west of Mound.

Bill Graham Photos.



When the track structure freezes this fall, Ross plans to concentrate on finding new customers and planning service improvements for old ones. Dakota Rail has received good coverage in local newspapers. Shippers and the communities were skeptical at first, but have become warmly supportive. Solid homework and operating results are the tools for rebuilding the railroad's traffic base.



## Wisconsin: The Time Machine

- Aaron Isaacs

Railroads are a window to the past for those who love living history. Through conservative management and decades of heavy federal regulation, their change slowed to a crawl. Railroads until recently always seemed to keep ancient pieces of their past intact, buildings, rolling stock and even the rails themselves, well beyond their useful lives. And because they usually fostered the development of their day, railroads now run among the oldest buildings in any town you might happen to visit.

**John Diers** and I recently went looking for the past in Wisconsin and found a fine example in Eau Claire. Sometime in the early 1900's, the **Chicago & North Western** relocated its crossing of the Chippewa River to reduce curvature and increase the axle loading of cars. Happily they kept the old bridge, a wondrously tall and spindly web of iron, to serve industrial track inaccessible from the new mainline.

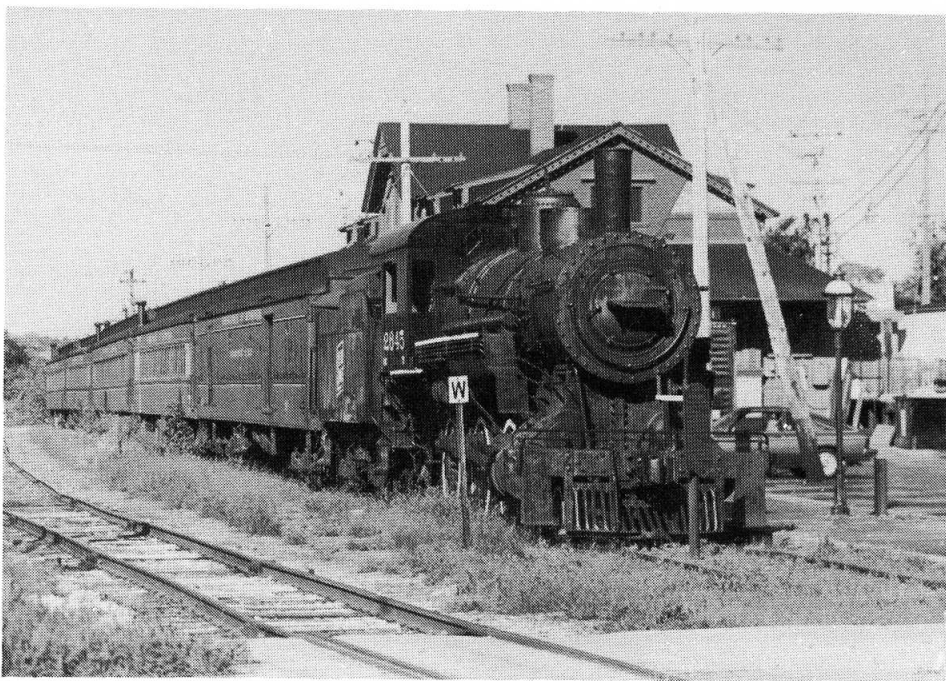
Owen, WI, is where the **Soo Line's** Duluth and Twin Cities mainlines converge and head for Chicago. We were savoring the still active depot when we noticed a line of structures a block away that could only accompany a track. Among them was a fine brick depot of 1880 vintage now put to other use. No track was present, and the 1928 rail atlas showed no abandoned line. What could have happened? We guessed it was a line relocation complete with a new depot, but could not be sure. We were sure, though, we had stumbled across an old story that few remember.



Tower still guards Soo mainline at Neenah.



Soo's Chicago-Duluth mainline squeezes through Oshkosh, WI, where tots rollic on sidewalk.



Soo Line Ten Wheeler and GM&O coaches grace C&NW station at Watertown, WI. Coaches last ran on Chicago-Joliet "Plug" commuter. Anyway, it's the thought that counts.

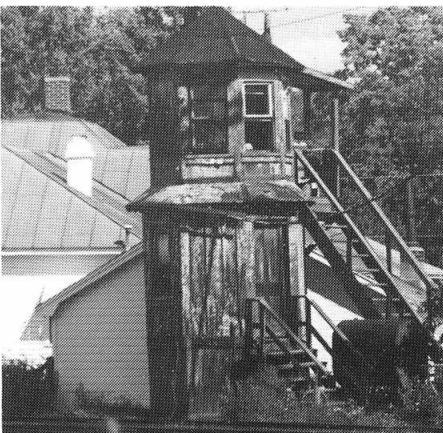
**Alton and Southern**

Part of the charm of the past lies in casual route alignments that must make modern day safety officers lie awake nights. Consider the Soo's route through Oshkosh, WI. Apparently unable to secure its own right of way, the mainline runs along the curb of a residential street, where children play within feet of hotshot freights.

Preservation of the town depot is almost obligatory today. The most common reuses are as restaurants and museums. The latest trend is to find any old railroad car and make it part of the exhibit, with results that can wander pretty far afield. Witness the **Chicago & North Western's** depot at Watertown, where a rather forlorn Soo Line Ten Wheeler (4-6-0) heads a string of **Chicago & Alton** coaches lettered for a fictional "Watertown & Western." Or consider the former **Chicago, North Shore & Milwaukee** interurban depot at Kenosha plastered with "Choo-Choo" signs. Thank goodness for serious preservationists.

A back issue of **MODEL RAIL-ROADER** described the Beaver Dam and Fox Lake branches that fed the **Milwaukee Road** mainline from Milwaukee to Portage. Each is less than two miles long with a balloon loop track at the ends. Trains would detour up the branches and return to the mainline without ever needing to back up. The 1941 "Official Guide" lists two mixed trains each way daily, each with Chicago connections.

Improbably, the loops still are there although the one in Fox Lake is inactive. **Wisconsin Southern**, a new shortline, has taken over the mainline, but the victorian Fox Lake depot, which ought not to be there at all, is lovingly preserved with its curving platform intact. It looks like a toy, one of Disney's three-fifths scale reconstructions, and a perfect place to board Wisconsin's time machine.



Terrible toll of time shows on Milwaukee Road tower, still used in La Crosse.

## About That East Troy Streetcar...

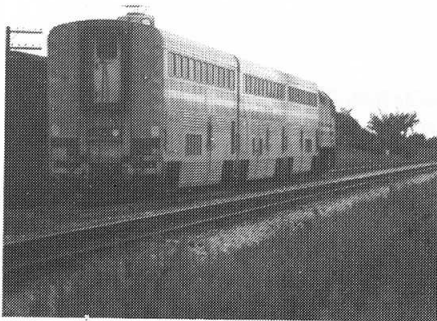
The March/April **Minnegazette** described the surprising rebirth of former **Twin City Rapid Transit Car 1583** (footnote), rebuilt and back in service at East Troy, WI. Our visit in September showed that the restoration departs from original design in many ways. It has been given the Twin Ports Electric roster number 253 even though the car never ran in Duluth, and obviously is missing the unique Duluth window arrangement of MTM's Duluth car 265.





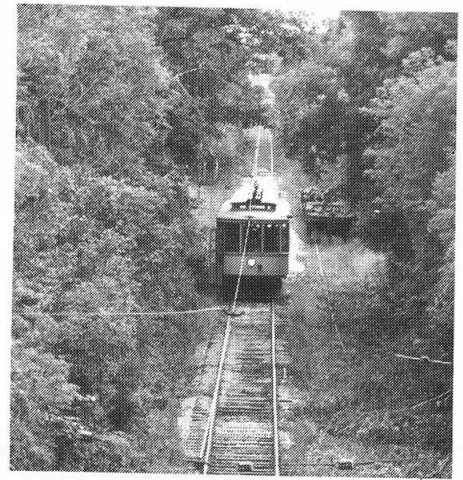


Fox Lake depot with balloon loop where mixed trains called four times daily. See map.



Three daily Amtrak trains shuttle from Chicago to Milwaukee.

Through Wisconsin woods trundles East Troy 253.



The box cab electric freight motor that ran until the 1970's has been replaced by a GE 44 ton diesel. Except for the last few feet, the Soo Line interchange at Mukwanago is unchanged with overhead wires in place and energized.

The now defunct **East Troy Trolley Museum** assembled a large collection of North Shore and TM equipment including locomotives and maintenance of way cars. Internal conflicts caused the group to terminate public operations, and their equipment sits idle at Phantom Woods near Mukwanago.

The new operator, **Paul Averdung**, also keeps a former **Chicago, South Shore & South Bend** coach and a home built single truck open car on the railroad. The East Troy offers the longest museum trolley ride in the country, and with improved track, looks and feels like a real old-time interurban.

(Note: The earlier story incorrectly reported the TCRT car number as 1635 which in fact was burned after retirement.)



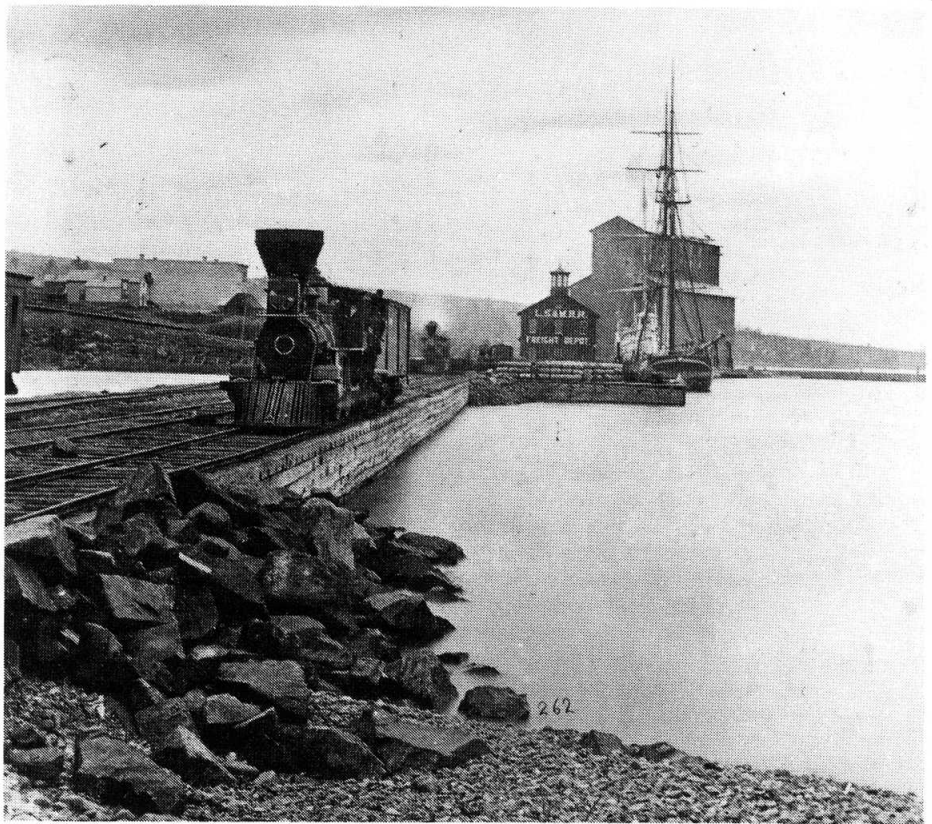
Chicago RTA commuters lay over at Kenosha. Aaron Isaacs Photos.

## Bye-Bye Skalley

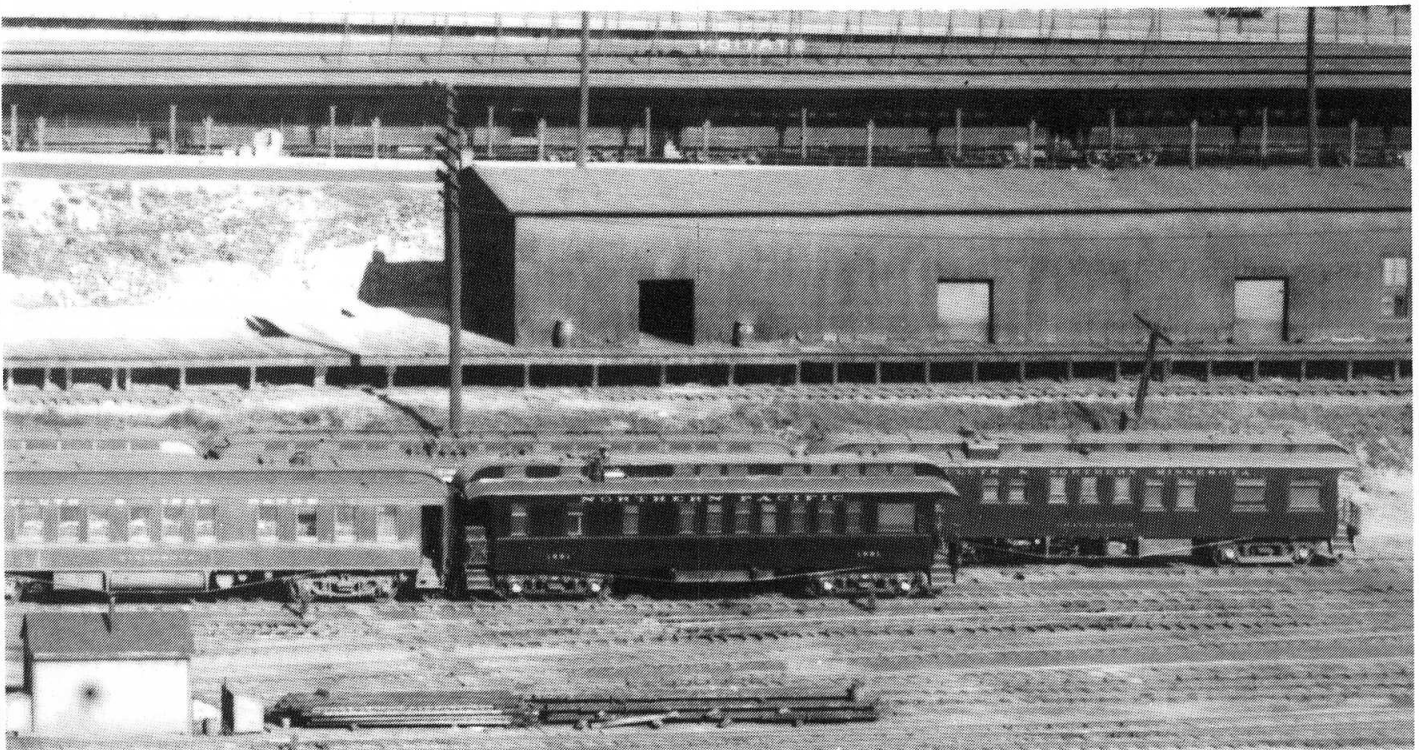
A key part of Minnesota's early rail network is disappearing as this is written. The **Burlington Northern's** "Skalley" line, first rail connection between St Paul and Duluth, was built during 1869-70 by **Jay Cook** as the **Lake Superior & Mississippi Railroad**. It operated variously under the heralds of the **St Paul & Duluth**, **Northern Pacific** and **Burlington Northern** railroads. Scandinavian immigrants are thought to have given the handle "Skalley," adopted by generations of railroaders.

In the early decades, Skalley connected Stillwater, White Bear Lake and other eastern Minnesota communities to the world. It was where Museum engine, **NP 328** worked for most of its life, tying up the mainline with its Stillwater and Taylors Falls branchline train. **Frank Sandberg** recalls a retired engineer crustily venting his feelings about trying to move time freight while 328 minced about its ritual at Wyoming and White Bear Lake. "Five hours late; trains piled up in both directions; not enough coal to put in your hat; and there'd be that (! -!) engine."

From downtown St Paul, the Skalley climbed up through Swede Hollow below the Hamm's Brewery, paralleled the

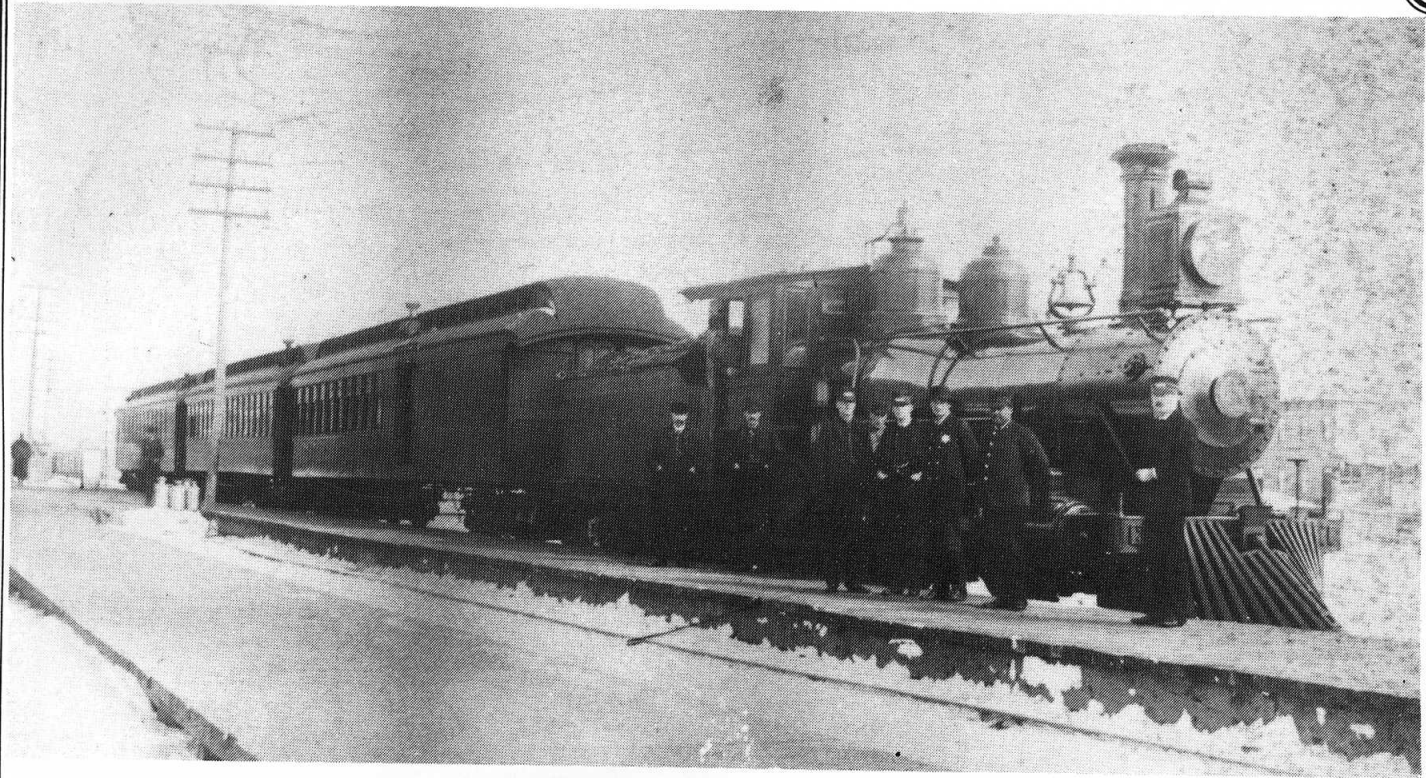


**Lake Superior & Mississippi woodburner switches Duluth waterfront in 1874. Steamer and sailing vessel are moored near road's freight depot. Minnesota Historical Society.**

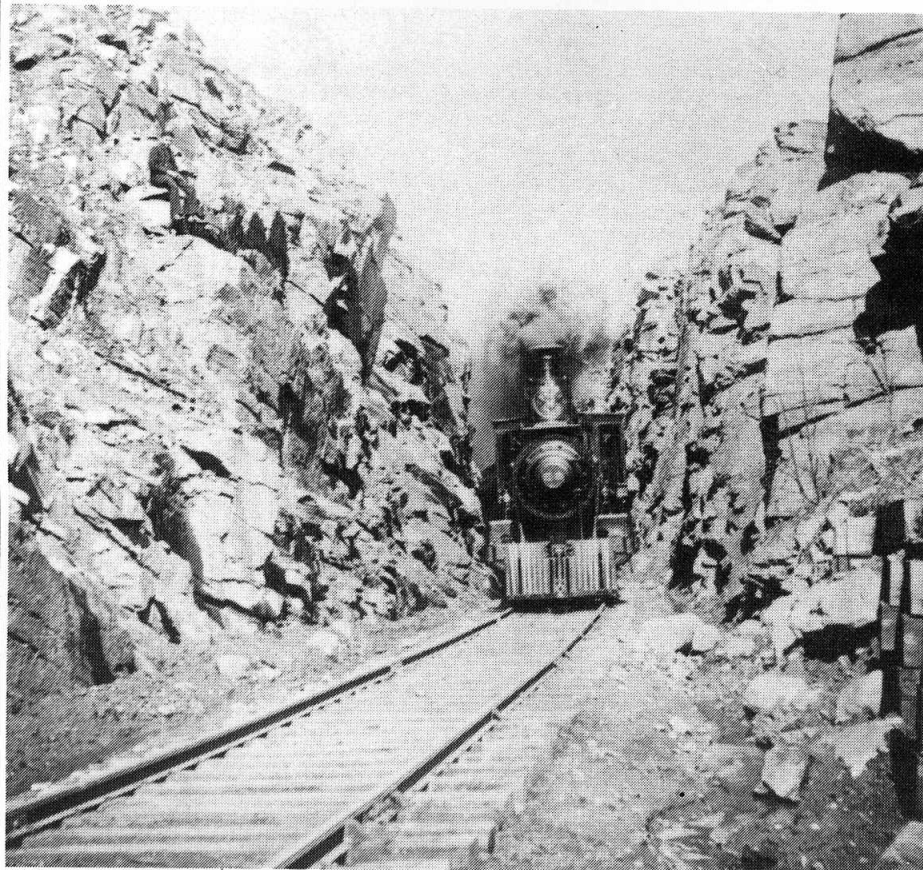


**Duluth & Iron Range "Minnesota" and Northern Pacific 1991 partially obscure Duluth & Northern Minnesota office car "Grand Marais" (far right) near Duluth Union Depot, 1915. If "Grand Marais" and MTM "Gopher" are the same car, why do Bedroom B windows appear not to match? Wayne C Olsen Collection.**





St Paul & Duluth engine 69, back on the road a year after rescuing Hinkley residents, heads a passenger train at unknown location in 1895. Minnesota Historical Society Photo.



Gleaming St Paul & Duluth engine 68 blasts through rock cut east of Carlton around 1894. Minnesota Historical Society Photo

Omaha Road mainline briefly at Arcade Street and turned north to Lake Phalen. Passing M & D Junction and the **Wisconsin Central** mainline at White Bear Lake, Skalley headed due north along US Highway 61 through Forest Lake, Stacey, Rush City, Pine City and Hinkley, where it crossed the **Eastern Minnesota Railroad**. Arcing northeast, it passed Finlayson, Moose Lake and Carlton, where the Staples and Bemidji lines branched, and where the Northern Pacific began Minnesota's first transcontinental in 1870.

The original line from Carlton to Duluth plunged down the St Louis River gorge to the estuary at Fond du Lac, hugging the Spirit Lake shore through New Duluth to the Head of the Lakes. **Burlington Northern** donated 4.7 miles of this section to the **City of Duluth**. Today the **Lake Superior Transportation Club** today operates summer excursions over it under the original name **Lake Superior & Mississippi**. Remnants of the trestles and right of way still can be seen in **Jay Cook State Park** west of Fond Du Lac. Shortly after 1900, Northern Pacific built a new high line from Carlton to Duluth, cut into the rock face of the Lake Superior escarpment in order to reduce grade and curvature.

Skalley gained permanent fame in the 1894 Hinkley forest fire. **Antone An-**



Missabe mallet No 225 is serviced, hot, and waiting for MRA excursion at Duluth Union Depot, July, 1961. Engine hardly noticed 9-car passenger train on Proctor Hill. Above engine cab is Soo Line passenger station. Bill Graham Photo.

der son recounts the saga in **THE HINKLEY FIRE** published in 1954. Engineer **James Root** running a southbound St Paul & Duluth train arrived at Hinkley just in time to rescue residents as the town became engulfed in a fire storm. The coaches ignited, but Root managed to back ten miles north to Skunk Lake where the refugees submerged themselves in the water. All were saved, although Root was badly burned, rails melted and the wooden train burned to its wheels. The engine, an American Standard No 69, was rebuilt and survived the Northern Pacific's 1900 merger with the St Paul & Duluth.

Skalley was well built, well maintained and capable both of heavy traffic and astonishing speed. In 1899, the St Paul & Duluth purchased three Atlantic-type (4-4-2) passenger engines from Baldwin, purely designed for light tonnage and gazelle-like speed. They boasted 78-inch driving wheels, and also joined the Northern Pacific's roster as Class N light express engines.

A latter-day taste of this action happened in July, 1961, when the **Minnesota Railfans Association** operated an

excursion over the Skalley to Duluth, and thence over the Missabe to Colleraine. The NP assembled seven heavy weight coaches, a solarium observation car and a passenger service GP9 diesel which left Minneapolis GN Station at 7 a.m. Missabe Yellowstone mallet No 225 picked up the consist at the Duluth Union Depot in late morning for the run to the Range up Proctor Hill. The return trip came down the **Duluth & Northeastern** behind its steamer No 27 from Saginaw to Cloquet, where the NP's GP9 was waiting for the return to the Twin Cities.

As expected, the complicated operation ran a shade later than the advertised. Railfans tensely speculated about a ballast-scorching finish to an already epic day. The ride down the Skalley met every expectation. After rejoining the mainline at Carlton, the Geep just kept accelerating as the last light of evening died. Hamlets slammed past in rapid succession, and at times it seemed the engineer had tied down the whistle cord. Arrival in St Paul was just under two hours after departure from Cloquet!

The Northern Pacific continued to operate a daytime passenger local and an overnight mail train between the Twin Cities and Duluth until the early 1960's. The night train carried a sleeper and made frequent stops to handle mail and express.

From early days, the Skalley's principal competitor was the Eastern Minnesota Railroad, later part of the **Great Northern** system. Both routes were absorbed into **Jim Hill's** empire late in the last century, a relationship that continued variously into modern times and culminated in the great BN merger of 1970. The Great Northern route passes through Cambridge, Brook Park, Hinkley, and Sandstone, crossing into Wisconsin and entering Superior.

The closely paralleling routes raised the question of excess capacity, with which BN was forced to deal in the 1970's. The prospect of freeway construction through downtown Duluth and the configuration of railroads entering the Twin Ports lead to selection of Superior as the primary rail terminal at the lakehead. Accordingly, BN abandoned the northerly half of the Skalley





**Minnesota Railfans Association excursion to Duluth and Coleraine pauses on the "Skalley" at Hinkley, July, 1961. Northern Pacific rolled out heavy-weight solarium/observation car for MRA's drumhead sign. Depot now houses Hinkley Fire Museum. Bill Graham Photo.**

from Hinkley to Moose Lake soon after its merger. The newer high line from Carlton to Duluth also was abandoned. The remnant from Moose Lake to Carlton lasted until 1981 as a branchline. Ribbon rail recently installed by the NP was reinstalled on the Great Northern line between Hinkley and Sandstone. The **Department of Natural Resources** purchased the abandoned grade which today is a state trail.

From St Paul to Hinkley, the Skalley continued to carry Duluth traffic of the **Milwaukee Road** under a trackage agreement dating from the early 1900's, routed onto the GN line at Hinkley. In addition, the BN/Frisco merger of 1980 granted **Chicago & North Western** similar trackage rights. The expectation of this additional traffic amounted to a reprieve for the Skalley.

Through traffic south of Hinkley ended in early 1986 when Chicago & North Western trains moved to the former Great Northern line. Earlier, Soo Line had rerouted former Milwaukee Road trains over its own line via Ladysmith, WI. This left only a BN way freight serving White Bear Lake over the M & D cut-off from East Minneapolis,

and another based at Hinkley to serve elevators at Forest Lake and Rush City.

The handwriting on the wall became clear in August, 1986, when the Frost Avenue crossing in Maplewood was repaved. New pavement and curbs were installed after BN removed its rails from the crossing. At about the same time, rails were lifted from the mainline near Forest Lake, thus permanently severing the Skalley as a through route. The remnants will continue to operate for a time as branchlines, but the day probably is near when the entire Skalley will be gone.

That's progress, adjustment to modern times and pruning of an overbuilt railroad net. But railfans swallow hard at such a fate for a line as old, important and affectionately remembered as the Skalley.

### Just Maybe Commuters?

Commuter trains would not be a new phenomenon on the Skalley, which carried suburbanites downtown from the 1870's into modern times. **Jim Hill** is said to have commuted to work from his White Bear Lake summer home aboard

his business car handled as a special train.

The **Metropolitan Council** rediscovered the idea in 1980 when it studied Twin City commuter corridors. They noted dense, rapid suburban growth in a corridor between St Paul and White Bear Lake, and estimated that a modern rapid transit line could handle over 30,000 daily riders in that corridor by year 2,000. Missing was an economical, direct, off-highway route for such a line, since Burlington Northern had announced it would operate the Skalley line indefinitely.

Things changed in six short years. The opportunity now exists to acquire and reserve part of the Skalley for a beeline transit route between White Bear Lake and downtown St Paul.

### About The Rear Cover

The schedule says it's Amtrak's "North Coast Hiawatha," and it sure looks like the "Morning Hi." On a bone-busting winter day in 1972, Milwaukee Road E-9's head east over GN Stone Arch Bridge with the Minneapolis mill district for backdrop. **Joe Elliott Photo**  
Courtesy of Aaron Isaacs.



## MTM Membership Application

The all-volunteer nonprofit Minnesota Transportation Museum was formed in 1962 for the purpose of finding, restoring and operating vintage rail equipment for the education and the enjoyment of the public as a reminder of days gone by. If you like what you see in this magazine, how about becoming a member and helping us? It is a rich experience filled with fun and tradition. Join us today!

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P.O. Box 1300, Hopkins, MN 55343





# MINNESOTA STREETCAR MUSEUM

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August 2021

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